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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,205	12/02/2003	Bridget Mary Pantaleo	67389-034	4686

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EXAMINER	
HECK, MICHAEL C	

ART UNIT	PAPER NUMBER
3623	

DATE MAILED: 12/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/725,205	PANTALEO ET AL.	
	Examiner	Art Unit	
	Michael C. Heck	3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 September 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-56* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-56* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 September 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This Final Office Action is responsive to applicant's amendment filed 30 September 2004. Applicant amended claim 1. Currently, claims 1-56 are pending.

Response to Amendment

2. The objection to the drawings in the First Office Action is withdrawn in response to the applicant's amendment to the specification.

3. The objection to the specification in the First Office Action is withdrawn in response to the applicant's amendment to the specification.

4. The 35 USC 101 rejection in the first Office Action for claims 1-21 is not withdrawn in response to the applicant's amendment to the specification and claims, thereof.

Response to Arguments

5. Applicant's arguments filed 30 September 2004 have been fully considered but they are not persuasive. Concerning the 35 U.S.C 101 technological art rejection, the applicant argues that the court decisions clearly indicate that "the inclusion in a patent of a process that may be performed by a person, but that is also capable of being performed by a machine, is not fatal to patentability". Also the applicant argues that since the examiner indicated the invention produces a useful, concrete, and tangible result that the "abstract idea" statement regarding the technological arts is not applicable since an "abstract idea" constitute disembodied concepts or truths which are

not "useful" from a practical standpoint standing alone, i.e., they are not "useful until reduced to some practical application". Concerning the 35 U.S.C. 102(b) rejection, the applicant argues that Davis (Davis, How CTI is Changing Workforce Management: What are the Possibilities for your Call Center?, Telemarketing & Call Center Solutions, Vol. 14, Issue 8, February 1996, start p. 74 [PROQUEST]) does not teach or suggest the approaches described in the claims. Specifically, applicant asserts that Davis identifies tasks that are not "subtasks" of the main task, and not associated with the main task.

In response to the 35 U.S.C. 101 technological art rejection, the phrase "technological arts" is synonymous with the phrase "useful arts" as it appears in Article I, Section 8 of the Constitution. *In re Waldbaum, 173 USPQ 430 (CCPA 1972).* For a claim to be statutory, it must be in the technological arts. *In re Musgrave, 167 USPQ 280 (CCPA 1970) and In re Johnston, 183 USPQ 172 (CCPA 1974).* The technological arts inquiry must focus on whether the claimed subject matter is statutory. *In re Toma, 197 USPQ 852 (CCPA 1978).* The invention in the body of the claim must recite technology. If the invention in the body of the claim is not tied to technological art, environment, or a machine, the claim is not statutory. *Ex parte Bowman, 61 USPQ2d 1665, 1671 (BD. Pat. App. & Inter. 2001)(unpublished). Also note MPEP 2106 IV B.2 (b).* Specifically, MPEP 2106 IV B.2 (b ii states a process that merely manipulates an abstract idea or performs a purely mathematical algorithm is non-statutory despite the fact that it might inherently have some usefulness. In Bowman, the Board affirmed the rejection under 35 U.S.C. 101 as being directed to non-statutory subject matter. The

Board held that the disclosed and claimed invention is directed merely to a human making mental computations and manually plotting results on a paper chart, and thus is nothing more that an abstract idea that is not tied to any technological art and is not a useful art as contemplated by the Constitution. Even though Bowman is not precedence, Bowman is being cited for its analysis of whether the claim is in the technological arts. In the current case, the claims as written do not employ a machine or article of manufacture in any manner to perform any of the recited method steps. The examiner indicated that claim 1 produces a useful, concrete, and tangible result, however, the claimed invention, as a whole, is not within the technological arts as explained above, therefore, claim 1 is deemed to be directed to non-statutory subject matter. Please see the 35 U.S.C. 101 rejection below.

In response to the 35 U.S.C. 102(b) rejection, the Davis reference teaches subtasks of call center employees when addressing capacity management and scheduling agents. Davis teaches the call center managers are to ensure enough TSRs are available to answer calls, that the TSRs have the proper skills to address callers needs, and that the TSRs are in the proper state of mind to satisfy each caller (Para 12-13). Davis teaches computer-telephony integration CTI will become a tool to help call centers: 1) provide the right number of telephone sales representatives (TSRs) with the right skills and attitudes to meet caller demand in every period of the day, and 2) ensure each TSR is productive and performing at a high level of quality (Para 1-3). The Workflow Management Systems help managers determine the number of TSRs needed to meet anticipated calling demand effectively and affordably, where the first step in

capacity management involves forecasting call volume, call handling times and TSR staffing levels required by interval (for example, every half hour) for each TSR group. The second step in capacity management involves scheduling TSRs (Para 16, 19 and 20). The applicant's own example in the specification on page 11 states, "The capacity planning system 150 identifies tasks received for the task input 102, and divides each task into a plurality of subtasks to be performed by the employees of the clearing house. The types and amounts of the subtasks are determined based on statistical data and/or empirical studies of the operation of [the] clearing house. For example, the task related to domestic clearance may include the following subtasks: Balancing with Broker, Manual Bookkeeping Entries, Adjusting Customer Accounts, Managing [Files], Managing Breaks, Phone Calls, Report Preparation and Distribution, Suspense Balancing, Research, Reconciliation, Letters to SEC". Clearly, the applicant is addressing a broad list of tasks related to a domestic clearing house to include tasks such as managing breaks, phone calls, and research. Davis teaches the workforce management system can track years of history and perform the necessary calculations to help managers forecast accurately, and also includes determining when breaks and lunches occur and when TSRs perform tasks other than answering calls (for example, outbound calling, training, meetings, research). The applicant is arguing that the task the TSR does, answering calls, is the main task and the reference does not have subtasks as part of the main task. However, the TSR answering calls is but one of the tasks the TSR does. Like the applicant's "domestic clearing house ", Davis teaches a "call center", and like the applicant's capacity planning system that "divides each task

into a plurality of subtasks to be performed by the employees of the clearing house" the call center capacity planning system takes into account the plurality of tasks the employees (TSR's) are to perform. Answering calls is only one task the TSRs perform, however that is not the only task the TSRs perform, just like "Balancing with Broker" is only one tasks an employee in a domestic clearing house has, but not the only task that is performed. Please see the 35 U.S.C. 102(b) and 35 U.S.C. 103(a) rejections below.

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 1-21 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

(1) whether the invention is within the technological arts; and

(2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For the process claim to pass muster, the recited process must

somehow apply, involve, use, or advance the technological arts. In the present case, **claims 1-21** only recite an abstract idea. As to **claim 1**, the recited method steps of: identifying each of a plurality of tasks; identifying subtasks associated with each of the plurality of tasks; accessing production rate information related to the amount of time or the number of staff needed to perform each of the identified subtasks; calculating a work volume based on the identified subtasks and the production rate information; accessing staff information; determining staff availability based on the staff information; and generating a capacity report based on the work volume and the staff availability does not apply, involve, use, or advance the technological arts since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper. The method only constitutes an idea for capacity planning, therefore, is deemed to be directed to non-statutory subject matter.

As to technological arts recited in the preamble, mere recitation in the preamble (i.e., intended or field of use) or mere implications of employing a machine or article of manufacture to perform some or all of the recited steps does not confer statutory subject matter to an otherwise abstract idea unless there is positive recitation in the claim as a whole to breathe life and meaning into the preamble. In the present case, none of the recited steps are directed to anything in the technological arts as explained above. Looking at the claim as a whole, nothing in the body of the claim recites any structure or functionality to suggest that a computer performs the recited steps. Therefore, the preamble is taken to merely recite a field of use.

Additionally, for a claimed invention to be statutory, the claimed invention must produce a useful, concrete, and tangible result. In the present case, the claimed invention produces capacity planning (i.e., repeatable, useful and tangible).

Looking at the claims as a whole, nothing in the body of the claims recite any structure or functionality to suggest that a computer performs a task. While claim 5 recites information is obtained from a database, this amounts to only data retrieval where nothing is done (i.e., computing) to breathe life into the invention.

Although the recited process produces a useful, concrete, and tangible result, since the claimed invention, as a whole, is not within the technological arts as explained above, the same rejection as stated above for claim 1 applies to claims 2-21.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claims 1-6, 15-16, 20-27, 37-45, and 53-56** are rejected under 35 U.S.C. 102(b) as being anticipated by Davis (Davis, How CTI is Changing Workforce Management: What are the Possibilities for your Call Center?, Telemarketing & Call Center Solutions, Vol. 14, Issue 8, February 1996, start p. 74 [PROQUEST]). Davis discloses a capacity planning method and system comprising:

- [**Claim 1**] identifying each of a plurality of tasks (Para 1-4, Davis teaches CTI (computer-telephony integration) will become the tool to help call centers: 1) provide the right number of telephone sales representatives (TSRs) with the right skills and attitudes to meet caller demand in every period of the day, and 2) ensure each TSR is productive and performing at a high level of quality. CTI introduces a greater degree of sophistication to workforce management by allowing more accurate targeting of incoming calls to specific TSRs (telephone service representatives) with specialized knowledge or skills.);

- identifying subtasks associated with each of the plurality of tasks (Para 20, Davis teaches scheduling TSRs to include determining when breaks and lunches occur and when TSRs perform tasks other than answering calls (for example, outbound calling, training, meeting, research). The examiner interprets breaks, outbound calling and research as a subtask associated with a task.);

- accessing production rate information related to the amount of time or the number of staff needed to perform each of the identified subtasks (Para 19, Davis teaches the first step in capacity management involves forecasting call volume, call handling times and TSR staffing levels required by interval (for example every half hour) for each TSR group. Workforce management systems can track years of history and perform the necessary calculations to help managers forecast accurately);

- calculating a work volume based on the identified subtasks and the production rate information (Para 22, Davis teaches predicting the number of TSRs required for the next few hours, based upon actual caller behavior);

- accessing staff information (Para 20, Davis teaches scheduling TSRs to includes determining when shifts start and end, when breaks and lunches occur. The examiner interprets the above information as staff information.);

- determining staff availability based on the staff information (Para 22, Davis teaches workforce management systems provide tools to compare actual TSR availability to the schedule); and

- generating a capacity report based on the work volume and the staff availability (Para 23, Davis teaches workforce management systems provide extensive reporting that allows managers to compare reality to plans).

- [**Claim 2**] the production rate information includes the amount of time needed to perform respective identified subtasks (Para 5, 19 and 20, Davis teaches managers need to know how many minutes of each particular skill or knowledge is needed every half-hour. Forecasting demand includes call-

handling times and TSR staffing levels required by interval. Scheduling TSRs include determining when TSRs perform tasks other than answering calls.).

- [**Claim 3**] the production rate information includes the number of each identified subtasks that can be performed per one time unit (Para 4, 19 and 20, Davis teaches CTI allows more accurate targeting of incoming calls to specific TSRs with specialized knowledge or skills. Capacity management involves forecasting TSR staffing levels required by interval (for example, every half hour) for each TSR group and then scheduling the TSRs. Implicitly the number of each identified subtask is known in order to schedule the right mix of TSRs.).

- [**Claim 4**] the time unit is an hour (Para 22, Davis teaches the workforce management system provides tools to predict the number of TSRs required for the next few hours).

- [**Claim 5**] the production rate information is obtained from a database or by observation (Para 19, Davis teaches workforce management systems can track years of history. Implicitly, a database is used.).

- [**Claim 6**] the work volume is calculated as the number of time units needed to perform the identified subtasks (Para 19, Davis teaches capacity management involves forecasting call volume, call handling times and TSR staffing levels required by interval (for example every half hour) for each TSR group. Workforce management systems tracks years of history and performs the necessary calculations to help managers forecast accurately.).

- [**Claim 15**] the work volume is calculated as the amount of time needed to perform the subtasks; and the staff availability is calculated as the total amount of time that employees can perform the subtasks within a specific period of time (Para 20, Davis teaches management involves scheduling TSRs – determining when shift start and end, when breaks and lunches occur and when TSRs perform tasks other than answering calls. Good workforce management systems offer sophisticated algorithms that factor individual TSR availabilities and work shift preferences into schedule development.).

- [**Claim 16**] the total amount of time that employees can perform the subtasks within the specific period of time is calculated by using the equation of: (the number of employees) · (the number of standard work hours per day) · (the number of business days within the specific period of time) - (the amount of time lost due to staff outage within the specific period of time) - (the amount of work time that cannot be used to perform the subtasks within the specific period of time) (Para 20 and 21, Davis teaches scheduling agents. Scheduling TSRs involves determining shift start and end, when breaks and

lunches occur and when TSRs perform task other than answering calls (for example, outbound calling, training, meeting, research). Forecasting and scheduling are performed days or weeks in advance. Inherently, the equation is used to schedule the number of TSRs required to handle the forecasted demand.).

- **[Claim 20]** the staff availability is calculated based on at least one of the number of employees, the information related to staff outage, the information related to the amount of work time that cannot be used to perform the subtasks, the information related to business days, and the amount of defined work hours per day (Para 20 and 21, Davis teaches scheduling agents. Scheduling TSRs involves determining shift start and end, when breaks and lunches occur and when TSRs perform task other than answering calls (for example, outbound calling, training, meeting, research). Forecasting and scheduling are performed days or weeks in advance. Inherently, the forecast and schedule are calculated.).

- **[Claim 21]** the information related to the amount of work time that cannot be used to perform the subtasks depends on at least one of the position, the identity, the exempt status, the handling capability, and the outage status of the respective employee (Para 20 and 21, Davis teaches scheduling agents. Scheduling TSRs involves determining shift start and end, when breaks and lunches occur and when TSRs perform task other than answering calls (for example, outbound calling, training, meeting, research). Forecasting and scheduling are performed days or weeks in advance.).

Claims 22-27, 37-45 and 53-56 substantially recites the same limitations as that of claims 1-6, 15-16 and 20-21 with the distinction of the recited method being a system and a program. Hence the same rejection for claims 1-6, 15-16 and 20-21 as applied above applies to claims 22-27, 37-45, and 53-56.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the

> subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. **Claims 7-11, 19, 28-33 and 46-49** are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis (Davis, How CTI is Changing Workforce Management: What are the Possibilities for your Call Center?, Telemarketing & Call Center Solutions, Vol. 14, Issue 8, February 1996, start p. 74 [PROQUEST]) in view of Reynolds (Reynolds, Automating for Better Workforce Management, Call Center Solutions, March 1999, p. 74-80 [PROQUEST]). As to claim 7, Davis discloses a capacity planning method and system but failed to teach the work volume is calculated as the number of fulltime employees needed to perform the identified subtasks, based on standard work hours per day. Reynolds teaches a telephone traffic engineering technique is used to determine the required number of staff based on the forecast workload. "Bodies in chairs" staff requirements along with nonproductive time estimates (for breaks, training, meetings, etc.) are used to determine a scheduling requirement for each half-hour or quarter hour period. A set of optimal schedules is then created based on these requirements and a call center's unique scheduling rules and constraints. These schedules are then assigned to staff based on shift bid rules and employee preferences. The savings associated with more efficient scheduling can take many forms, including reduced overall staff hours, reduced need for overtime and identification of overstaffed periods (p. 76-77). The examiner interprets standard work hours per day per staff member is used since overtime avoidance is a factor in calculating savings. It would

have been obvious to one of ordinary skill in the art to include the calculated staffing requirements of Reynolds with the teachings of Davis because Davis teaches workforce management system provide the right number of telephone sales representatives with the right skills and attitudes to meet caller demand in every period of every day (Para 1 and 2). Meeting customer demands to ensure customer satisfaction at minimal cost is a goal for profit-oriented companies. Matching and scheduling the right resources with the customer demand ensures the customers requirements will be met, therefore, minimizing cost and ensuring customer satisfaction.

- **[Claim 8]** the standard work hours per day are configurable (Reynolds: p. 76, Reynolds teaches a set of optimal schedules is then created based on these requirements and a call center's unique scheduling rules and constraints).

- [**Claim 9**] the staff information includes at least one of information related to the number of employees, capability of a specific employee to perform the subtasks, information related to exempt status of employees, information related to staff outage, information related to work time that cannot be used to perform the subtasks, and information related to business days within a specific period of time (Davis: Para 16, Davis teaches workforce management systems help managers determine the number of TSRs needed to meet anticipated calling demand effectively and affordably).

- [**Claim 10**] the information related to the number of employees includes at least one of the number of full-time employees, the number of other types of employees, the total hours worked by other types of employees expressed as a full-time employee equivalent; and the other types of employees include at least one of part-time employees, temporary employees, interns, and borrowed staff (Reynolds: P. 76, Table 1 and 3, Reynolds teaches a mixture of full- and part-time staff and shows the staff cost savings and annual staff cost).

- [**Claim 11**] the step of calculating extended staff availability by considering extended work hours; and wherein the capacity report is generated further based on the extended staff availability (Davis: Para 23, Davis teaches workflow management systems provide extensive reporting that allows managers to compare reality with plans to include answering questions such

as how well did we do in adjusting our schedule to respond to what actually happened during the day.).

- [**Claim 19**] the capacity report includes a cost analysis (Reynolds: Table 1, 2, 3, and 4, Reynolds teaches calculating savings.).

Claims 28-33, and 46-49 substantially recite the same limitations as that of claims 7-11 with the distinction of the recited method being a system and a program. Hence the same rejection for claims 7-11 as applied above applies to claims 28-30, 32-33, and 46-49.

6. **Claims 12-13, 17-18, 34-35 and 50-51** are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis (Davis, How CTI is Changing Workforce Management: What are the Possibilities for your Call Center?, Telemarketing & Call Center Solutions, Vol. 14, Issue 8, February 1996, start p. 74 [PROQUEST]) and Reynolds (Reynolds, Automating for Better Workforce Management, Call Center Solutions, March 1999, p. 74-80 [PROQUEST]) in view of Randhawa et al. (Randhawa et al., A Microcomputer-based Data Management and Capacity-planning System, International Journal of Operations & Production Management, Vol. 10, Issue 5, 1990, p. 52-61 [EBSCO]). As to claim 12, Davis and Reynolds disclose a capacity planning method and system but fail to teach the extended staff availability is calculated based on a plurality of overtime scenarios or a plurality of expanded staff scenarios. Randhawa et al. teach the scheduling module enables users to interactively change the initial schedule to achieve a balance workload over the specified time horizon (p. 55). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to include the

interactive change capability of Randhawa et al. with the teachings of Davis and Reynolds because Reynolds teaches more efficient scheduling to increase savings (p. 77). Meeting customer demands to ensure customer satisfaction at minimal cost is a goal for profit-oriented companies. Matching and scheduling the right resources with the customer demand ensures the customers requirements will be met, therefore, minimizing cost and ensuring customer satisfaction.

- [**Claim 13**] the capacity report is generated based on a first comparison between the work volume and the staff availability, and a second comparison between the work volume and the extended staff availability (Randhawa et al.: p. 55, Randhawa et al. teach the scheduling module produces graphs and reports for the schedules that are generated).

- [**Claim 17**] the step of calculating extended staff availability by considering extended work hours; and wherein the capacity report is generated further based on the extended staff availability (Randhawa et al.: p. 55, Randhawa et al. teach the scheduling module enables users to interactively change the initial schedule to achieve a balance workload over the specified time horizon. The scheduling module produces graphs and reports for the schedules that are generated).

- [**Claim 18**] the extended staff availability is calculated based on a plurality of over time scenarios or on a plurality of expanded staff scenarios (Randhawa et al.: p. 55, Randhawa et al. teach the scheduling module enables users to
- interactively change the initial schedule to achieve a balance workload over the specified time horizon.).

Claims 34-35 and 50-51 substantially recite the same limitations as that of claims 12-13 with the distinction of the recited method being a system and a program. Hence the same rejection for claims 12-13 as applied above applies to claims 34-35 and 50-51.

7. **Claims 14, 36 and 52** are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis (Davis, How CTI is Changing Workforce Management: What

are the Possibilities for your Call Center?, Telemarketing & Call Center Solutions, Vol. 14, Issue 8, February 1996, start p. 74 [PROQUEST]) and Reynolds (Reynolds, Automating for Better Workforce Management, Call Center Solutions, March 1999, p. 74-80 [PROQUEST]) and Randhawa et al. (Randhawa et al., A Microcomputer-based Data Management and Capacity-planning System, International Journal of Operations & Production Management, Vol. 10, Issue 5, 1990, p. 52-61 [EBSCO]) as applied to claim 1. As to claims 14, the examiner takes Official Notice that the step of generating warnings based on the first comparison and the second comparison. For example, in generating an EXCEL spread sheet, a user can identify a calculation and highlight areas of concern by having the spreadsheet indicate the results in a different color, therefore, alerting the user that an issue may exist or a decision point has been reached. It would have been obvious to one of ordinary skill in the capacity planning art to use the alert system of EXCEL with the teachings of Davis, Reynolds, and Randhawa et al. since Randhawa et al. teach interactively changing the initial schedule to achieve a balance workload (p. 55). Capacity planning understands demand versus resources and allows the user to plan ahead to balance the load. Unbalanced situation require action whether they be on the demand or resource side of the equation. Visibly highlighting the variances alerts the user that action is required, therefore, ensuring the user can accurate plan ahead for a balance load.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Heck whose telephone number is (703) 305-8215. The examiner can normally be reached Monday thru Friday between the hours of 8:00am - 4:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq R. Hafiz can be reached on (703) 305-9643. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

Any response to this action should be mailed to:

Director of the United States Patent and Trademark Office
P.O. Box 1450
Alexandria, Virginia 22313-1450

Or faxed to:

(703) 872-9306 [Official communications; including After Final communications labeled "**Box AF**"]

(703) 746-9419 [Informal/Draft communication, labeled "**PROPOSED**" or "**DRAFT**"]

Hand delivered responses should be brought to 220 South 20th Street, Crystal Plaza Two, Lobby, Room 1B03, Arlington, Virginia 22202.

mch
07 December 2004

TARIQ R. HAFIZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600